## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

application of

: PATENT APPLICATION

CHARLES W. GARDNER, JR. ET AL.

: WIDE FIELD METHOD FOR DETECTING PATHOGENIC

Serial No. 10/608,470

: MICROORGANISMS

Filed June 27, 2003

### LETTER

Pittsburgh, Pennsylvania 15219 January 16, 2004

Commissioner for Patents P. O. Box 1450 Alexandria, Virginia 22313-1450

#### Application Processing Division Customer Correction Branch

Sir:

We are in receipt of the official filing receipt for the above-identified patent application.

In reviewing the official filing receipt we note that the domestic priority data information was omitted. Please insert the following:

--Domestic Priority Data As Claimed by Applicant-THIS APPLN CLAIMS BENEFIT OF 60/347,806 01/10/2002 and 10/339,807 01/10/03--

It is respectfully requested that a <u>corrected</u> official filing receipt be issued and forwarded to us as soon as possible to the address listed below. If you have any questions regarding this request, please direct your call to our Legal Assistant, Angie Beyerl, at 412-562-1035.

Respectfully submitted,

Duane A. Stewart III Registration No. 54,468

BUCHANAN INGERSOLL, P.C.

Druane a. Stewart 8

20th Floor, 301 Grant Street Pittsburgh, Pennsylvania 15219

(412) 562-1622

As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

SIPER	METHOD FOR		ATTIOCENIC MICHOODC ANIEMS	
M 2 0 2004 &	. •	CDETECTION OF PA	ATHOGENIC MICROORGANISMS	
the specification of which	ch (check one):			
TRADE WATER X	_ is attached hereto _ was filed on June : _ and was amended		n Serial No. 10/608,470 , if applicable	
I hereby state that I have by any amendment refer		rstand the contents of th	ne above-identified specification, including the	e claims, as amended
I acknowledge the duty Code of Federal Regula			the examination of this application in accorda	nce with Title 37,
	ed below and have al	lso identified below any	s Code, Section 119 of any foreign application y foreign application for patent or inventor's continuation.	
Prior Foreign Application(s)				Priority Claimed
				Yes No
(Number)		(County)	(Date/Month/Year Filed)	
as the subject matter of provided by the first par	each of the claims of ragraph of Title 35, U code of Federal Regu	this application is not of this application is not of Jnited States Code, Sectilations, Section 1.56(a)	on 120 of any United States applications listed disclosed in the prior United States application tion 112, I acknowledge the duty to disclose rowhich occurred between the filing date of the	n in the manner naterial information
10/339,807		1/10/03	Pending	
(Application Seria	ıl No.)	(Filing Date)	(Status: patented, pending, abando	ned)
60/347,806		1/10/02	Abandoned	
(Application Seria	ıl No.)	(Filing Date)	(Status: patented, pending, abando	ned)
I hereby appoint the foll	owing attorney(s) to	prosecute this applicati	ion and to transact all business in the Patent ar	nd Trademark Office

I hereby appoint the following attorney(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith: Lynn J. Alstadt, Reg. No. 29,362; George P. Baier, Reg. No. 26,717; Dennis M. Carleton, Reg. No. 40,938; Craig G. Cochenour, Reg. No. 33,666; Michael L. Dever, Reg. No. 32,216; John E. Grosselin, III, Reg. No. 38,478; Bryan H. Opalko, Reg. No. 40,751; Michael G. Panian, Reg. No. 32,623; Duane A. Stewart III, Reg. No. 54,468; and Carla J. Vrsansky, Reg. No. 36,958.

Address all telephone calls to Address all correspondence to

Michael L. Dever, Esquire Buchanan Ingersoll Professional Corporation

One Oxford Centre 301 Grant Street, 20th Floor Pittsburgh, Pennsylvania 15219-1410 412-562-1637

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first invertor Charles W. Gardner, Jr.	
Inventor's Signature ( had h Sh )	Date 10/28/03
Residence Gibsonia, Allegheny County, Pennsylvania	Citizenship <u>USA</u>
Post Office Address: 4878 Wickloe Drive, Gibsonia, Pennsylvania 15044	·
Full name of second joint inventor John S. Maier	
Inventor's Signature	Date
Residence Pittsburgh, Allegheny County, Pennsylvania	Citizenship <u>USA</u>
Post Office Address 622 S. Lang Avenue, Pittsburgh, Pennsylvania 15208	
Full name of third joint inventor Matthew P. Nelson	
Inventor's Signature	Date
Residence Pittsburgh, Allegheny County, Pennsylvania	Citizenship <u>USA</u>
Post Office Address 3941 Dowling Avenue, Pittsburgh, Pennsylvania 15221	
Full name of fourth joint inventor Robert C. Schweitzer	
Inventor's Signature 2 of C Schwerze	Date
Residence Pittsburgh, Allegheny County, Pennsylvania	Citizenship <u>USA</u>
Post Office Address 245 Knickerbocker Drive, Pittsburgh, Pennsylvania 15235	
Full name of fifth joint inventor Patrick J. Treado	15/
Inventor's Signature	_ Date
Residence Pittsburgh, Allegheny County, Pennsylvania	Citizenship <u>USA</u>
Post Office Address 315 S. Lexington Avenue, Pittsburgh, Pennsylvania 15208	

Full name of sixth joint inventor G. Steven Vanni		
Inventor's Signature Staven Varan	Date 10-28-03	
Residence Pittsburgh, Allegheny County, Pennsylvania	Citizenship <u>USA</u>	
Post Office Address 6336 Marchland Street, Apt. 2, Pittsburgh, Pennsylvania 1	5206-4312	
Full name of seventh joint inventor: Julianne Wolfe		
Inventor's Signature Julian Wolfer	Date 10/28/03	
Residence Pittsburgh, Allegheny County, Pennsylvania	Citizenship <u>USA</u>	
Post Office Address 3070 Texas Avenue Pittsburgh Pennsylvania 15216		

.

.

•

# WIDE FIELD METHOD FOR DETECTING PATHOGENIC MICROORGANISMS.

# CROSS REFERENCE TO RELATED APPLICATIONS

This application claims priority pursuant to 35 U.S.C. § 119(e) to United States Provisional Application Serial No. 60/347,806, filed January 10, 2002 as well as United States Patent Application Serial No. 10/339,807, filed January 10, 2003 which are incorporated herein by reference in its entirety including incorporated material.

#### Field of the Invention

The present invention relates to the field of chemical and biological analysis and more specifically to the use of wide field Raman and fluorescence spectroscopy to quickly identify biological agents and pathogens.

### **Background of the Invention**

Terrorist deployment of chemical and/or infectious biological agents as weapons of mass destruction threatens the welfare of the human populace. Public concern has grown, especially in our nation, as terrorist uses of biothreat agents, such as Anthrax, become reality. Nightmare images of tens of thousands of infected and dying innocent victims strike fear in the hearts of nearly everyone. Biological and chemical warfare is significant, not only in lives lost, but also in the cost to the US economy. The Centers for Disease Control estimates that the loss of 100,000 lives will have a \$29 B economic impact. The mass destruction potential of Biological Warfare Agents ("BWAs") and Chemical Warfare Agents (CWAs) is thought by many to be comparable to or even greater than that of nuclear weapons. Nuclear weapons have the potential to affect a finite area, albeit very large, and the use of such weapons is immediately obvious after the fact. BWAs and CWAs, on the other hand, have virtually no boundaries and have the potential to spread silently and unchecked through populations far from ground zero. Likewise, technology to rapidly detect and quantify very low levels of radioactive contamination is widely available. Unfortunately, such technology for BWAs and CWAs at similar levels is not definitive, not widely available and in many cases, is not very rapid.

The psychological impact of this type of threat is also very significant. The public is becoming increasingly aware of new, emerging pathogens. Fears over the unseen